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Scott A. Rosenberg

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MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP

300 S. WACKER DRIVE

32ND FLOOR

CHICAGO, IL 60606

EXAMINER

CARLSON, JEFFREY D

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/978,144  
Filing Date: October 15, 2001  
Appellant(s): ROSENBERG ET AL.

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David L. Ciesielski  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 12/31/2009 appealing from the Office action mailed 6/11/2009.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

2002/0083439	ELDERING	6-2002
5,848,397	MARSH et al	12-1998
7,017,173	ARMSTRONG et al	3-2006

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-3, 5, 7-8, 11-15, 17-21, 23, 38, 61-63, 68-75, 78-81 and 84-89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eldering (US20020083439) in view of Marsh et al (US5848397).

Regarding claims 1-3, 8, 38, 74-75, 78, 79, Eldering teaches personal video recorders (PVRs) that include local hard drive storage for received ads [0013, 0014]. The local device includes an ad processing unit which determines the ad queue/order and inserts the ads into available ad opportunities (avails) upon request for an ad [0015, 0046]. More importantly, the ad processing unit also re-orders the ad queue upon certain parameters such as a channel change (i.e. a context change) by the viewer [0016]. This enables the newly re-ordered queue to best target the viewer [0018]. The channel change can be taken to represent a global context parameter. The ad queue/order is taken to be a “data structure”. In order to accomplish this targeting,

Eldering receives not only advertising content from a server, but also each advertisement's targeting metadata [¶ 0074]. Both the ad content and the ad metadata is then stored locally so that the real-time ad queue re-ordering can be accomplished by the client programmed with such a capability [¶ 0015]. Eldering provides metadata associated with each stored advertisement so that ads appropriate to the current context (viewer, channel, program type, time, etc) can be put towards the top of the queue [¶ 0032, 0034, 0051, 0053, 0054, 0063, 0065-0067]. In particular however to the "checking to determine if the updated parameter is a trigger parameter", Eldering teaches that certain parameter changes may in some cases not represent trigger parameters – changing from "60 minutes" to "Dateline" may in some cases not trigger re-ordering of the ad queue since the programs are both of the same program type, "news shows" [¶ 0060]. This exemplifies the concept that the ad metadata can specify show types and that detected changes in shows within the same show type are not (in this example) trigger parameters. Of course, depending on the advertiser-specified metadata, other parameter changes are indeed trigger parameters. This collection of targeting metadata for each ad is taken to represent the claimed "ad control files" whereby each targeting parameter of Eldering relates to the claimed trigger parameters. It would have been obvious to one of ordinary skill at the time of the invention to have received and stored newly released batches of advertising content and corresponding metadata and to have added them to the pre-existing collection so that new advertising for newly released products can be launched alongside ongoing ad campaigns; this obvious accumulation of targeting parameters is synonymous with a trigger table as

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claimed. Eldering does not appear to teach a weighted placement value for an ad derived by a product of a re-determined placement value and the ad's weight value whereby the ad's weight value is based upon the ad control file's weight rule which includes an equation for proportionate weight value increase as time passes. Marsh et al also teaches methods and systems for determining a sorted queue of ads to be used to display on-screen advertising to a user. In particular, Marsh et al teaches that a server can deliver the advertising content as well as the metadata ("ad control information") such as expiration, maximum user impressions, etc.) needed for the client to determine queue sorting and advertisement placement [8:47-63]. One of the aspects deemed important to advertisement sorting and display is sorting the queue based on "time since last seen" (tsls) as well as (advertiser-specified) criteria for each ad, namely a pre-defined weights such as  $c2=TSLS\_WEIGHT$ . These are used in a typical equation which multiplies terms with coefficients [10:30-53] to determine a queue order of ads. The ads can then be displayed in accordance with the queue. It would have been obvious to one of ordinary skill at the time of the invention to have borrowed the time-dependant concepts from Marsh et al and implemented them with the continually re-ordered advertising queue of Eldering's PVR's ad processing unit so as to enable advertisers to specify equations using particular time-based elements/coefficients, thereby offering the customized ability to prioritize particular ads according to time passed since it was last seen.

Regarding claims 5, 11, 13, 15, 62, 63, Eldering teaches that the ad queue is a stacked list of ARLs (ad resource locators) that point to the stored locations for each ad

in the queue. The next ad to be played is placed on the top of the heap/stack. [fig 3, fig 6, 0032, 0049].

Regarding claim 7, the automated re-ordering of the ads triggered by a channel change is taken to represent interpreted rules that are programmed in to the ad selection software.

Regarding claim 14, Eldering teaches that each ad can include various targeting parameters such as time of day, program being watched, identified viewer, etc [fig 5, fig 6, 0081]. The re-ordering of the ad queue according to matched parameters is taken to represent re-ordering a placement value according to a weight value for the ads and their parameters. The ads on the top of the new queue are taken to have higher weighted ad placement values.

Regarding claim 12, Eldering shuffles the ad queue in real-time in advance of the ad insertion requests and therefore accomplishes these tasks asynchronously.

Regarding claims 17-19, the ads of Eldering may be inserted into predefined commercial breaks as conventional full page ads. However, Eldering also teaches that ads may be presented in association with electronic program guides (EPGs); these ads are taken to represent banner ads in predetermined locations on screen [0027].

Regarding claims 20-21, any of the metadata can be taken to represent the broadly stated placement rule, local parameter value, weight rule and trigger rule.

Regarding claims 23, 72, Marsh et al teaches the use of ad campaign expiration dates as part of his ad control information. It would have been obvious to one of ordinary skill at the time of the invention to have included the expiration capabilities with

the system of Eldering in order to keep the advertising fresh, timely and relevant for the advertisers and viewers.

Regarding claim 61, the system of Eldering is taken to include modules programmed to accomplish its function which integrates with the other programmed modules. The modules can be taken to be cooperating applications.

Regarding claim 68, Eldering teaches that a newly detected targeting parameter such as channel='romance channel' causes a plurality of ads to be selected as relevant – Macy's ad, DeBeers ad, Ford Taurus ad, etc. [¶ 0063].

Regarding claim 69, Eldering teaches that targeting (triggering) can be done in accordance with time [¶ 0077].

Regarding claim 70, one of ordinary skill would find it obvious to use any well known and convenient data format in order to provide a schema for representing/structuring the metadata. XML is a well known system for defining data formats and it would have been obvious to one of ordinary skill at the time of the invention to have used XML to represent the metadata of Eldering. Further, applicant indicates that the particular selection of XML as the format is not critical – "The example is encoded in XML format, although any appropriate format will suffice" [applicant's PGPUB ¶ 0059].

Regarding claim 71, by their nature, Eldering's metadata (control files) encompassing the targeting parameters define a rule set for each associated ad.

Regarding claim 73, Eldering teaches logging the advertising history and reporting such data to a server [¶ 0048].



Regarding claims 80, 81, Marsh et al provides for constants to be used in determining ad order: priority constant: HIGH, MEDIUM, LOW, NO [8:49-54] as well as the use of constants in the equation [10:46] and expiration constants and maximum exposure constants [9:44-49].

Regarding claims 84-89, it is not clear if Marsh et al specifies a unit for his time elements. However Official Notice has previously been taken that UNIX and other computer systems typically compare/measure time according to seconds passed with respect to the 1970-01-01 00:00:00 epoch as a frame of reference. It would have been obvious to one of ordinary skill at the time of the invention to have used any known time unit, including epoch seconds to determine and compare timestamps.

Claims 31, 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eldering (US20020083439) and Marsh et al (US5848397) as above and further in view of Armstrong et al (US7017173).

Regarding claims 31, 39, Eldering teaches ad opportunities peculiar to PVRs such as prepended ads, live shows, recorded shows, end of program ads, etc. Eldering does not appear however to teach inserting an ad upon the detection of a pause mode of the PVR. Armstrong et al however teaches that an interactive video on demand system can insert a targeted ad upon detection of paused programming content [abstract]. It would have been obvious to one of ordinary skill at the time of the invention to have inserted an ad when a user of the system of Eldering enters a pause mode so as to enable additional advertising opportunities for advertisers.

### **(10) Response to Argument**

Applicant argues that the combination does not lead to “the weight rule of at least one of the ad control files comprises an equation for calculating a weight value that increases proportionately to time passed”. Examiner has addressed this language in the rejection above. Further, the assignment of the advertising metadata’s constant can be taken to be an equation where  $TSL\_WEIGHT = c2 = [\text{some value}]$ . This is used for calculating a weight value that increases with time where the increase in time is reflected at least in the time since last seen which is taken to increase over time when that ad has not been shown.

Applicant argues that the combination does not lead to multiplying a re-evaluated placement value by the weight value (so as to determine a weighted placement value for the ad). Time since last seen (tsls) can also be representative of a re-evaluated placement value that is multiplied by the weight value for that ad, C2 (tsls weight).

Applicant points out that in the final rejection, claims 31 and 39 were written as rejected using “Merriman et al”. Examiner has corrected this typo so as to read “Claims 31, 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eldering (US20020083439) and Marsh et al (US5848397) as above and further in view of Armstrong et al (US7017173).”. Unamended claims 31 and 39 were rejected with the same written reasoning in the non-final of 12/19/2008 and the final of 6/11/2009. That is to say, both actions specified that Eldering lacked ads during a pause mode, and both actions specified that Armstrong et al taught such a feature and that it was obvious to

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include pause ads with that of the base reference, Eldering. Therefore it should have been clear that claims 31 and 39 were rejected in the final with the reasoned basis of Eldering and Marsh et al, further in view of Armstrong et al. Further still, it should have been clear that "Merriman" was not relied upon in the final rejection, due to the complete lack of discussion or mention of Merriman. Lastly, applicant's argued reasons for allowability predictably do not bother to substantively address any teachings of Merriman.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Jeffrey D. Carlson/  
Primary Examiner, Art Unit 3622

Conferees:

Alexander Kalinowski/AK/  
Supervisory Patent Examiner, Art Unit 3691

Eric Stamber/E. W. S./  
Supervisory Patent Examiner, Art Unit 3622